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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/675,218 | 09/30/2003 | Hanna Yehuda | EMC03-20(02068) | 9873 |
| 22468 | 7590 | 09/11/2006 | EXAMINER | |
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| | | | ART UNIT | PAPER NUMBER |
| | | | 2193 | |

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,218

Applicant(s)

YEHUDA ET AL.

Examiner

Chris Watt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Grace et al. (U.S. Patent Application Publication No. 2004/0075680).

As to claim 1, Grace discloses (FIGS. 4-5) a method to support displaying management information in a graphical user interface (i.e. "graphical user interfaces for managing electronic networks", "managing large numbers of parameters associated with devices in such networks" [0010]), the method comprising: displaying a management information view (i.e. "generally provide a user with the ability to selectively display certain information" [0043]) that includes management information associated with at least one managed entity in a network (i.e. "may refer ... to any devices or software associated with a computer network" [0043], "other network aspects could also be provided" [0044]), displaying a drill down menu (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]) associated with the management information view (i.e. "graphical user interface" 400 and 500 in FIGS. 4 and 5, see also [0043]-[0044]), the drill down menu including selectable drill down options (i.e. "display

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items" selected from "available items" in FIGS. 4 and 5) that correspond to respective drill down functions selectively applied (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043]) to the management information associated with the at least one managed entity (i.e. "may refer ... to any devices or software associated with a computer network" [0043], "other network aspects could also be provided" [0044]), identifying a selected drill down option chosen from the drill down menu (i.e. "display items" selected from "available items" in FIGS. 4 and 5), producing a drill down view by applying the respective drill down function associated with the selected drill down option to the management information associated with the at least one managed entity, the produced drill down view including a presentation of the management information based on the applied respective drill down function, and displaying the drill down view on the graphical user interface (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043], demonstrated in display of information in FIGS. 6-17).

As to claim 21, Grace teaches a computer system supporting management information views associated with a storage area network (i.e. "the invention relates to graphical user interfaces for managing electronic networks ... storage area networks (SANs), and the like" [0010]), the computer system comprising a processor, a memory unit that stores instructions associated with an application executed by the processor, a communication interface that supports communication with other nodes of the storage area network, and an interconnect coupling the processor (i.e. "computing, data storage, and communications networks are just a few examples of networks for which

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new devices and methods of sharing data are continually developed and improved" [0004]), the memory unit, and the communication interface, enabling the computer system to execute the application and perform operations of displaying a management information view (i.e. "generally provide a user with the ability to selectively display certain information" [0043]) that includes management information associated with at least one managed entity in a network (i.e. "may refer ... to any devices or software associated with a computer network" [0043], "other network aspects could also be provided" [0044]), displaying a drill down menu (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]) associated with the management information view (i.e. "graphical user interface" 400 and 500 in FIGS. 4 and 5, see also [0043]-[0044]), the drill down menu including selectable drill down options (i.e. "display items" selected from "available items" in FIGS. 4 and 5) that correspond to respective drill down functions selectively applied (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043]) to the management information associated with the at least one managed entity (i.e. "may refer ... to any devices or software associated with a computer network" [0043], "other network aspects could also be provided" [0044]), identifying a selected drill down option chosen from the drill down menu (i.e. "display items" selected from "available items" in FIGS. 4 and 5), producing a drill down view by applying the respective drill down function associated with the selected drill down option to the management information associated with the at least one managed entity, the produced drill down view including a presentation of the management information based on the applied respective drill

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down function, and displaying the drill down view on the graphical user interface (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043], demonstrated in display of information in FIGS. 6-17).

As to claim 41, Grace teaches a computer program product including a computer-readable medium having instructions stored thereon for processing data information (i.e. "computing, data storage, and communications networks are just a few examples of networks for which new devices and methods of sharing data are continually developed and improved" [0004]), such that the instructions, when carried out by a processing device, enable the processing device to perform operations of displaying a management information view (i.e. "generally provide a user with the ability to selectively display certain information" [0043]) that includes management information associated with at least one managed entity in a network (i.e. "may refer ... to any devices or software associated with a computer network" [0043], "other network aspects could also be provided" [0044]) displaying a drill down menu (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]) associated with the management information view (i.e. "graphical user interface" 400 and 500 in FIGS. 4 and 5, see also [0043]-[0044]), the drill down menu including selectable drill down options (i.e. "display items" selected from "available items" in FIGS. 4 and 5) that correspond to respective drill down functions selectively applied (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043]) to the management information associated with the at least one managed entity (i.e. "may refer ... to any devices or software associated with a computer network" [0043], "other

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network aspects could also be provided" [0044]), identifying a selected drill down option chosen from the drill down menu (i.e. "display items" selected from "available items" in FIGS. 4 and 5), producing a drill down view by applying the respective drill down function associated with the selected drill down option to the management information associated with the at least one managed entity, the produced drill down view including a presentation of the management information based on the applied respective drill down function and displaying the drill down view on the graphical user interface (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043], demonstrated in display of information in FIGS. 6-17).

As to claim 42, Grace teaches a computer system for supporting management information views associated with a storage area network (i.e. "the invention relates to graphical user interfaces for managing electronic networks ... storage area networks (SANs), and the like" [0010]), the computer system including means for displaying a management information view (i.e. "generally provide a user with the ability to selectively display certain information" [0043]) that includes management information associated with at least one managed entity in a network (i.e. "may refer ... to any devices or software associated with a computer network" [0043], "other network aspects could also be provided" [0044]), means for displaying a drill down menu (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]) associated with the management information view (i.e. "graphical user interface" 400 and 500 in FIGS. 4 and 5, see also [0043]-[0044]), the drill down menu including selectable drill down options (i.e. "display items" selected from "available items" in FIGS. 4 and 5) that

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correspond to respective drill down functions selectively applied (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043]) to the management information associated with the at least one managed entity (i.e. "may refer ... to any devices or software associated with a computer network" [0043], "other network aspects could also be provided" [0044]), means for identifying a selected drill down option chosen from the drill down menu (i.e. "display items" selected from "available items" in FIGS. 4 and 5), means for producing a drill down view by applying the respective drill down function associated with the selected drill down option to the management information associated with the at least one managed entity, the produced drill down view including a presentation of the management information based on the applied respective drill down function and means for displaying the produced drill down view (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043], demonstrated in display of information in FIGS. 6-17).

As to claim 17, Grace teaches a method of displaying management information on a display screen (i.e. "the invention relates to graphical user interfaces for managing electronic networks ... storage area networks (SANs), and the like" [0010]), the method comprising, on a first portion of the display screen, displaying a vertical hierarchy of selectable icons representing managed entities of a storage area network (i.e. "expandable tree diagram 602 of expandable symbols 604 representing network devices" [0046]), on a second portion of the display screen, displaying a summary view of collective management information associated with at least two selected managed

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entities of the storage area network (i.e. "a summary display 606 is also included that provides information regarding the user selected symbol 608, which is in this example the symbol for the entire SAN", "option 662 has been selected, such that the Summary Window 606 displays general information regarding the items represented" [0048], also note "My SAN Summary" in FIG. 7), on a third portion of the display screen, displaying a detailed view of separately listed management information for each of the at least two selected managed entities in the network (i.e. "a Detail Option 652 could be similarly selected to provide additional detail in the Summary Window 606" [0049], also note "My SAN Detail" in FIG. 8), and on a fourth portion of the display screen, displaying a drill down menu including multiple selectable drill down options (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]) to drill down with respect to at least a portion of the management information displayed in the detailed view of separately listed management information (i.e. "i [sic] will be appreciated that the various options displays of the Summary display 606 can be configured by a user to display specific information desired (e.g., through the main menu 620, as illustrated by reference to FIGS. 2 and 3)" [0049]).

As to claim 37, Grace teaches a computer system for displaying management information views associated with a storage area network (i.e. "the invention relates to graphical user interfaces for managing electronic networks ... storage area networks (SANs), and the like" [0010]), the computer system comprising a processor, a memory unit that stores instructions associated with an application executed by the processor, a communication interface that supports communication with nodes of the storage area

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network and an interconnect coupling the processor (i.e. "computing, data storage, and communications networks are just a few examples of networks for which new devices and methods of sharing data are continually developed and improved" [0004]), the memory unit, and the communication interface, enabling the computer system to execute the application and perform operations of on a first portion of a display screen, displaying a vertical hierarchy of selectable icons representing managed entities of a storage area network (i.e. "expandable tree diagram 602 of expandable symbols 604 representing network devices" [0046]), on a second portion of the display screen, displaying a summary view of collective management information associated with at least two selected managed entities of the storage area network (i.e. "a summary display 606 is also included that provides information regarding the user selected symbol 608, which is in this example the symbol for the entire SAN", "option 662 has been selected, such that the Summary Window 606 displays general information regarding the items represented" [0048], also note "My SAN Summary" in FIG. 7), on a third portion of the display screen, displaying a detailed view of separately listed management information for each of the at least two selected managed entities in the network (i.e. "a Detail Option 652 could be similarly selected to provide additional detail in the Summary Window 606" [0049], also note "My SAN Detail" in FIG. 8), and on a fourth portion of the display screen, displaying a drill down menu including multiple selectable drill down options (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]) to drill down with respect to at least a portion of the management information displayed in the detailed view of separately listed

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management information (i.e. "i [sic] will be appreciated that the various options displays of the Summary display 606 can be configured by a user to display specific information desired (e.g., through the main menu 620, as illustrated by reference to FIGS. 2 and 3)" [0049]).

As to claim 2, Grace teaches a method as in claim 1, wherein the respective drill down function associated with the selected drill down option (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043]) identifies a particular category in which to drill down to a lower level with respect to the management information associated with the at least one managed entity (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]).

Claim 22 differs from claim 2 only in that claim 22 is a computer system claim whereas, claim 2 is a method claim. Thus, claim 22 is analyzed as previously discussed with respect to claim 2 above.

As to claim 3, Grace teaches a method as in claim 2, wherein displaying a drill down menu includes: displaying the drill down menu (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]) to include drill down options associated with managed entities in a storage area network (i.e. "may refer ... to any devices or software associated with a computer network" [0043], "other network aspects could also be provided" [0044]), the drill down menu including at least one of the following drill down options: database, database file, file system, volume group, host device, HBA (Host Bus Adapter), storage device, pool, port/storage group, unallocated devices (i.e. hosts 124, 126 and 152, "It is understood that this is a very simplified view of a SAN 100

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with representative storage devices and hosts coupled to the fabric 102. It is understood that quite often significantly more devices and switches are used to develop the full SAN 100" [0034]).

Claim 23 differs from claim 3 only in that claim 23 is a computer system claim whereas, claim 3 is a method claim. Thus, claim 23 is analyzed as previously discussed with respect to claim 3 above.

As to claim 4, Grace teaches a method as in claim 1, wherein displaying a management information view (i.e. "generally provide a user with the ability to selectively display certain information" [0043]) includes receiving a selection of at least one managed entity icon (i.e. "expandable symbols that can be navigated to explore the structure of a network" [0012]) representing a corresponding at least one managed entity in the network (i.e. "may refer ... to any devices or software associated with a computer network" [0043], "other network aspects could also be provided" [0044]), receiving a selection of a type of management information view in which to display management information associated with managed entities represented by the selected at least one managed entity icon (i.e. "display items" selected from "available items" in FIGS. 4 and 5), and based on the selection of a type of management information view, applying a display function to the management information associated with the at least one managed entity in the network to graphically display the management information associated with the selected at least one managed entity icon (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043], demonstrated in display of information in FIGS. 6-17).

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Claim 24 differs from claim 4 only in that claim 24 is a computer system claim whereas, claim 4 is a method claim. Thus, claim 24 is analyzed as previously discussed with respect to claim 4 above.

As to claim 5, Grace teaches a method as in claim 1, wherein displaying a management information view includes maintaining a database of managed objects associated with managed entity icons (i.e. "the interconnections of such devices ... are stored" [0011]), the managed entity icons corresponding to managed entities of a storage area network (i.e. "expandable symbols 804 representing network devices and details 806 of a user selected symbol 808" [0056]), and upon detecting selection of at least one managed entity icon for producing a management information view (i.e. "expandable symbols that can be navigated to explore the structure of a network" [0012]), retrieving at least one corresponding managed object stored in the database associated with the selected at least one managed entity icon (i.e. "the interconnections of such devices ... are stored" [0011]) to identify the management information associated with the selection of the at least one managed entity icon (i.e. "to determine what devices are present in the network and the interconnections of such devices" [0011], "determining ... the connection of a first set of devices to the first device" [0013]).

Claim 25 differs from claim 5 only in that claim 25 is a computer system claim whereas, claim 5 is a method claim. Thus, claim 25 is analyzed as previously discussed with respect to claim 5 above.

As to claim 6, Grace teaches a method as in claim 1 further comprising allocating a first portion of a display screen to include a hierarchy of selectable icons representing

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managed entities of a storage area network (i.e. "expandable tree diagram 602 of expandable symbols 604 representing network devices" [0046]), allocating a second portion of the display screen to include the management information view associated with the at least one managed entity in the network (i.e. "expandable symbols 804 representing network devices and details 806 of a user selected symbol 808" [0056]), allocating a third portion of the display screen to display a detailed view including separately listed entries of management information for each of the at least one managed entity in the network displayed in the second portion of the display screen (i.e. "a Detail Option 652 could be similarly selected to provide additional detail in the Summary Window 606" [0049], also note "My SAN Detail" in FIG. 8), and allocating a fourth portion of the display screen to include the drill down menu (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]).

Claim 26 differs from claim 6 only in that claim 26 is a computer system claim whereas, claim 6 is a method claim. Thus, claim 26 is analyzed as previously discussed with respect to claim 6 above.

As to claim 7, Grace teaches a method as in claim 1 further comprising, in relation to the management information view (i.e. "generally provide a user with the ability to selectively display certain information" [0043]) including management information associated with the at least one managed entity in the network, displaying a detailed view of individually presented management information for each of the at least one managed entities (i.e. "selectively display certain information ... status variables or

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configurable settings of such devices or software" [0043], demonstrated in display of information in FIGS. 6-17).

Claim 27 differs from claim 7 only in that claim 27 is a computer system claim whereas, claim 7 is a method claim. Thus, claim 27 is analyzed as previously discussed with respect to claim 7 above.

As to claim 8, Grace teaches a method as in claim 7, wherein the management information in the management information view includes a single graph of collective management information associated with multiple managed entities of the network (i.e. "a summary display 606 is also included that provides information regarding the user selected symbol 608, which is in this example the symbol for the entire SAN", "option 662 has been selected, such that the Summary Window 606 displays general information regarding the items represented" [0048], also note "My SAN Summary" in FIG. 7 and network summary graphics in FIGS. 2-3).

Claim 28 differs from claim 8 only in that claim 28 is a computer system claim whereas, claim 8 is a method claim. Thus, claim 28 is analyzed as previously discussed with respect to claim 8 above.

As to claim 9, Grace teaches a method as in claim 7 further comprising providing corresponding icons on the display screen to enable a user to selectively hide the management information view (i.e. "expandable symbols that can be navigated to explore the structure of a network" [0012], "a user can select the type of information, the order of the items and the level of detail that is desired" [0043]).

Claim 29 differs from claim 9 only in that claim 29 is a computer system claim whereas, claim 9 is a method claim. Thus, claim 29 is analyzed as previously discussed with respect to claim 9 above.

As to claim 10 Grace teaches a method as in claim 1, wherein the management information in the management information view includes a single graph of collective management information associated with the at least one managed entity (i.e. "a summary display 606 is also included that provides information regarding the user selected symbol 608, which is in this example the symbol for the entire SAN", "option 662 has been selected, such that the Summary Window 606 displays general information regarding the items represented" [0048], also note "My SAN Summary" in FIG. 7 and network summary graphics in FIGS. 2-3).

Claim 30 differs from claim 10 only in that claim 30 is a computer system claim whereas, claim 10 is a method claim. Thus, claim 30 is analyzed as previously discussed with respect to claim 10 above.

As to claim 11, Grace teaches a method as in claim 1 further comprising displaying path information in relation to the management information view, the path information including: i) an entry corresponding to a present drill down level view of the displayed management information in the management view, and ii) at least one entry of a previous drill down level view of previously displayed management information (reflected in "tree diagram" 602, i.e. "the graphical user interface includes an expandable tree diagram of expandable symbols that can be navigated to explore the structure of a network" [0012], "additional layers of information may also be provided on

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the tree diagram 602" [0047], "managing large numbers of parameters associated with devices in such networks" [0010]).

Claim 31 differs from claim 11 only in that claim 31 is a computer system claim whereas, claim 11 is a method claim. Thus, claim 31 is analyzed as previously discussed with respect to claim 11 above.

As to claim 12, Grace teaches a method as in claim 11, wherein the at least one entry of the previous drill down level view may be selected by a user to change contents of the management information view back to a corresponding previously displayed management information view (i.e. "the Detail Option 852 of the Details display 806 is selected such that various details ... are provided with respect to the selected symbol 808 in the tree diagram 802" [0056]).

Claim 32 differs from claim 12 only in that claim 32 is a computer system claim whereas, claim 12 is a method claim. Thus, claim 32 is analyzed as previously discussed with respect to claim 12 above.

As to claim 13, Grace teaches a method as in claim 1 further comprising highlighting a subset of drill down options in the drill down menu depending on which of the drill down options may be selected by a user to produce a next displayable drill down view (i.e. "display items" selected from "available items" in FIGS. 4 and 5, see also [0043]-[0044]).

Claim 33 differs from claim 13 only in that claim 33 is a computer system claim whereas, claim 13 is a method claim. Thus, claim 33 is analyzed as previously discussed with respect to claim 13 above.

As to claim 14, Grace teaches a method as in claim 1 further comprising displaying a hierarchy of managed entity icons that may be traversed based on use of a drill down technique (i.e. "the Detail Option 852 of the Details display 806 is selected such that various details ... are provided with respect to the selected symbol 808 in the tree diagram 802" [0056]), and in relation to at least a portion of the managed entity icons in the hierarchy, providing a display region in relation to the managed entity icons to receive an input selection by a user of which management information to display for multiple selected managed entities of the network (i.e. "expandable symbols 804 representing network devices and details 806 of a user selected symbol 808" [0056]).

Claim 34 differs from claim 14 only in that claim 34 is a computer system claim whereas, claim 14 is a method claim. Thus, claim 34 is analyzed as previously discussed with respect to claim 14 above.

As to claim 15, Grace teaches a method as in claim 1, wherein the drill down menu includes at least two sets of selectable drill down options (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]), a first set of selectable drill down options related to storage features of a storage area network, a second set of drill down options related to host features of the storage area network (i.e. hosts 124, 126 and 152, "It is understood that this is a very simplified view of a SAN 100 with representative storage devices and hosts coupled to the fabric 102. It is understood that quite often significantly more devices and switches are used to develop the full SAN 100" [0034], "a user can select the type of information, the order of the items and the level of detail

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that is desired", "may refer as examples, to any devices or software associated with a computer network" [0043]).

Claim 35 differs from claim 15 only in that claim 35 is a computer system claim whereas, claim 15 is a method claim. Thus, claim 35 is analyzed as previously discussed with respect to claim 15 above.

As to claim 16, Grace teaches a method as in claim 1 further comprising in relation to the management information view including management information associated with the at least one managed entity in the network (i.e. "generally provide a user with the ability to selectively display certain information" [0043]), displaying a detailed view of individually presented management information for each of the at least one managed entities, enabling a user to individually select each of the at least one managed entity in the detailed view (i.e. "a Detail Option 652 could be similarly selected to provide additional detail in the Summary Window 606" [0049], also note "My SAN Detail" in FIG. 8), and wherein producing a drill down view further includes applying the respective drill down function to management information associated with individually selected managed entities displayed in the detailed view (i.e. "selectively display certain information ... status variables or configurable settings of such devices or software" [0043]).

Claim 36 differs from claim 16 only in that claim 36 is a computer system claim whereas, claim 16 is a method claim. Thus, claim 36 is analyzed as previously discussed with respect to claim 16 above.

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As to claim 18, Grace teaches a method as in claim 17, wherein displaying a drill down menu includes displaying the drill down menu to include drill down options (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]) associated with managed entities in a storage area network (i.e. "the invention relates to graphical user interfaces for managing electronic networks ... storage area networks (SANs), and the like" [0010]), the drill down menu including at least one of the following drill down options to drill down to a corresponding lower level with respect to displayed management information: database, database file, file system, volume group, host device, HBA (Host Bus Adapter), storage device, pool, port/storage group, unallocated devices (i.e. hosts 124, 126 and 152, "It is understood that this is a very simplified view of a SAN 100 with representative storage devices and hosts coupled to the fabric 102. It is understood that quite often significantly more devices and switches are used to develop the full SAN 100" [0034], "a user can select the type of information, the order of the items and the level of detail that is desired", "may refer as examples, to any devices or software associated with a computer network" [0043]).

Claim 38 differs from claim 18 only in that claim 38 is a computer system claim whereas, claim 18 is a method claim. Thus, claim 38 is analyzed as previously discussed with respect to claim 18 above.

As to claim 19, Grace teaches a method as in claim 17, wherein the drill down menu includes at least two sets of selectable drill down options (i.e. "user selectable list" 402 and 502 in FIGS. 4 and 5, see also [0043]-[0044]), a first set of selectable drill down options related to storage features of a storage area network, a second set of drill down

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options related to host features of the storage area network (i.e. hosts 124, 126 and 152, "It is understood that this is a very simplified view of a SAN 100 with representative storage devices and hosts coupled to the fabric 102. It is understood that quite often significantly more devices and switches are used to develop the full SAN 100" [0034], "a user can select the type of information, the order of the items and the level of detail that is desired", "may refer as examples, to any devices or software associated with a computer network" [0043]).

Claim 39 differs from claim 19 only in that claim 39 is a computer system claim whereas, claim 19 is a method claim. Thus, claim 39 is analyzed as previously discussed with respect to claim 19 above.

As to claim 20, Grace teaches a method as in claim 17 further comprising on a fourth portion of the display screen, displaying path information path information including: i) an entry corresponding to a drill down view of presently displayed management information, and ii) at least one entry corresponding to a previously displayed drill down view of management information (reflected in "tree diagram" 602, i.e. "the graphical user interface includes an expandable tree diagram of expandable symbols that can be navigated to explore the structure of a network" [0012], "additional layers of information may also be provided on the tree diagram 602" [0047], "managing large numbers of parameters associated with devices in such networks" [0010]).

Claim 40 differs from claim 20 only in that claim 40 is a computer system claim whereas, claim 20 is a method claim. Thus, claim 40 is analyzed as previously discussed with respect to claim 20 above.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Battat et al. (U.S. Patent No. 5,958,012) teaches a network management system that includes drill down functionality, hierarchical menus, database storage of network information, path information and icons representing various network components.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Watt whose telephone number is (703) 270-1046. The examiner can normally be reached on Monday-Thursday 6:30-4:00 Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (703) 270-0000. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Chris Watt/

August 28, 2006


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SUPERVISORY PATENT EXAMINER

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